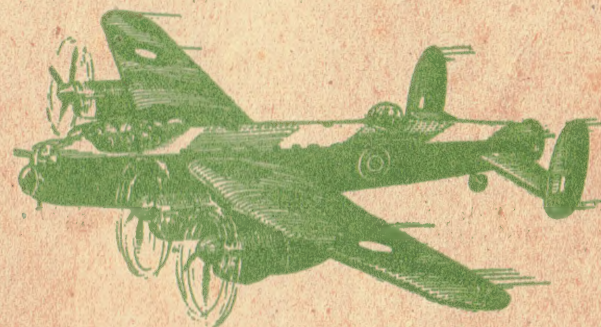


MODEL OF THE AVRO "LANCASTER" HEAVY BOMBER

SPAN 102 FT. LENGTH 69 FT. 6 INS.



SIZE OF MODEL.
SPAN 17ins.
LENGTH 11 1/2ins.

THIS PORTION
FITS INTO FUSELAGE.

SECTION OF WING

VEE
CUT

TOP SURFACE

WING.
CUT TWO $3\frac{3}{4}$ in.
AND SHAPE TO SECTIONS

CUT TO VEE SHAPE
ALONG THIS LINE AND
BEND UPWARDS TO GET
DIHEDRAL ANGLE.

THIS PORTION
FITS INTO FUSELAGE.

**TAIL PLANE.
CUT TWO 3/16in.
AND SHAPE TO
SECTION.**

PANELS OF WOOD REQUIRED FOR THIS DESIGN

TWO ND12 ONE MD8 ONE G3

The price is shown in *Hobbies Weekly*, Oct. 18th, 1948, but is subject to revision. See the current edition of *Hobbies Handbook*, or write for price to Hobbies Limited, Dereham, Norfolk.

FUSELAGE,
CUT TWO PIECES
1/2in. TO THE OUTLINE
AND GLUE TOGETHER
AND AFTERWARDS SHAPE
TO SECTIONS A, B AND C.

INSERT TAIL PLANE HERE

TURRET.
CUT ONE
1/2in. AND
SHAPE TO
FIT FUSELAGE

PROPELLER
BLADE.
CUT TWELVE
FROM THE 3/16in.
WOOD AND SHAPE
TO GET TWIST.

SIDE VIEW

FIN AND
RUDDER.
CUT TWO
3/16in. AND
SHAPE TO
SECTION.

FRET PIN
SECTION

SHAPING TO FUSE-
LAGE CROSS SECTIONS
ON THE LINES SHOWN
ON PLAN, ETC.

INNER ENGINE. CUT TWO $3/4$ in.
AND SHAPE TO THE OUTLINE SHOWN
IN PLAN AND SECTION.

**WHEEL
READY FOR
FIXING TO
FUSELAGE.**

STIRRUP
FOR WHEEL
MADE FROM
WIRE.

TAIL WHEEL.
CUT ONE $3/16$ in
AND SHAPE
TO SECTION.

:PLAN:
HALF ONLY
SHOWN

FRONT VIEW, HALF ONLY SHOWN

Details for construction of a model non-flying LANCASTER

THE patterns on the other side of the sheet provide all the necessary details for building a non-flying model of the famous heavy bomber. The necessary wood is provided in the Hobbies standard panels, the price of which is given in Hobbies Weekly or obtainable on request.

The completed model has a 17in. span and an overall length of just 12ins. The patterns are shown full size, and there is a side, top and front view which can be studied during the operation of construction. Although half the plan only is shown, it can be easily traced to the opposite outline if needed.

The shape should be transferred to the wood in the thickness required, by means of tracing paper or carbon paper. It is not advisable to paste the patterns down, but to retain them for reference.

The Fuselage

Cut the fuselage first in two pieces each $\frac{1}{2}$ in. thick, and notice the apertures for the wing and the tail. Glue the two parts together, and then shape to a gradual taper towards the tail. Notice the dotted lines at AA., BB. and CC. The shape at these points is given at the cross shaded sections shown lower down on the sheet.

This shaping is done with a rasp, file, and finished off with glasspaper. The astro-dome will be made half round, and the pilot's cockpit and bomb-aimer's place at the front must be carefully rounded according to the shapes shown in the side view, front view, etc.

Wings

The wings are cut from $\frac{1}{4}$ in. wood shaped to the shaded section on the pattern, with the taper towards the trailing end. To get the dihedral or lifting angle towards the outer end a sawcut must be made almost through the wood at the line shown, then the part is carefully pressed upwards until you get the angle shown in the front view. Be sure to get both wings to the same angle.

When completed, the wings are glued in place to meet in the centre of

the fuselage. The tailplane consists of the cross plane and the two end rudder fins. All the parts are shaped carefully and then the tailplane inserted through the fuselage. The end upright fin is then glued on and should be strengthened with two or three fretnails or fine pins driven through the ends as shown on the pattern.

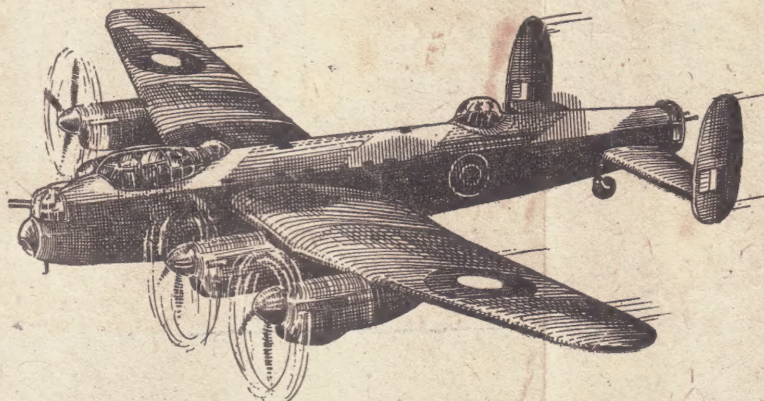
The gun turret on the top of the fuselage is a separate piece cut to a circle and shaped round at the top. The under edge, of course, will have to be shaped slightly concave, and this can be done by laying a piece of

propellers, although the actual holes for their insertion should be made first.

Engine Details

The engine exhausts are shown as pieces A, and eight will be required. Their inner edge must be curved so they bed snugly to the engine nacelle, and they are later painted or just cut round to indicate the various pipes of which the whole thing is composed.

Notice that the outer engines are shorter than the inner engines, and mark off carefully their position along the length of the wing.



glasspaper on the fuselage itself and rubbing the turret part along it to get the correct curve.

The tailwheel is the only one shown in the model, and the construction of this is as given on the details at the bottom of the sheet. A little circular wooden wheel of $\frac{3}{16}$ in. wood is put on a stirrup shaped piece of wire, and then a bracket soldered from it to lead upwards to the underside of the fuselage near the tail.

Propellers

Twelve propeller blades will be required. They are cut from $\frac{3}{16}$ in. wood shaped correctly, and then glued into the front of the engine at the points shown by the front view.

The engines themselves are made as four separate units shaped on the underside to fit the wing, and rounded according to the section. It is best to glue them in place before fitting on the

The completed model must be carefully cleaned up and painted. A first coat of dull paint is given, and allowed to harden, then the final coat added. These night bombers are usually black all over, with red and blue roundels above the wings, and red, white, blue and yellow on the underside as well as on the side of the fuselage. They do not have a large individual letter, but numerals in the usual positions.

The Perspex of the cabins can be painted on with light blue or grey, the framing of the metal work being brown or black. The flaps, windows, etc. can also be painted on, care being taken to get the lines even, steady and straight.

The excellence of the model is, indeed, made by the manner in which it is finished. In this respect the drawing of the finished model is helpful.